

SuperServer 5039MC-H12TRF



Integrated Board



Super X11SCE-F

Views: | [Angled View](#) | [Node View](#) |
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Note: Image above may show a varied configuration of optional parts. Please refer to parts list for standard parts included.

Key Features (per node)

- ☐ Cloud Computing

☐ Web Cache

☐ Web Hosting, VM

☐ Social Networking

☐ Corporate-WINS, DNS, Print, Login
1. Single socket H4 (LGA 1151) supports Intel® Xeon® processor E-2100/E-2200, 8th Gen. Intel® Core™ i3 Processors, Intel® Celeron®, Intel® Pentium®

2. Intel® C246 chipset

3. Up to 128GB unbuffered VLP ECC, up to DDR4-2666MHz; 4 DIMM slots

4. 1 Micro-LP slot (MicroLP upgradable)

5. 2x 3.5" SATA3 drives or 4x 2.5" SATA3 drives or 2x 2.5" NVMe + 2x 2.5" SATA3 drives or 2x 2.5" NVMe + 1x 3.5" SATA3 drive

6. **M.2 Interface:** 1 PCI-E 3.0 x4 and SATA
M.2 Form Factor: 2280, 22110
M.2 Key: M-Key

7. 2 GbE LAN ports via Intel i350

8. Aspeed AST2500 graphics

9. 4x 9cm Heavy duty fans with optimal cooling zone (per system)

10. 2000W Redundant power supplies
Titanium Level Certified (per system)

Specifications

Product SKUs

SuperServer	■ SYS-5039MC-H12TRF (Black)
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Motherboard

Super X11SCE-F

Processor (per Node)

CPU	■ Single Socket H4 (LGA 1151), CPU TDP support up to 95W ■ Support Intel® Xeon® processor E-2100 / E-2200 series, 8th Gen. Intel® Core™ i3 / Pentium® / Celeron® Processors
Cores	■ 8 cores max.
Note	■ BIOS 1.0b or above is required to support Intel® Xeon® processor E-2200 series

System Memory (per Node)

Memory Capacity	■ 4 DIMM slots ■ Up to 128GB Unbuffered ECC ■ Up to DDR4-2666MHz
Memory Type	■ 2666/2400/2133MHz ECC DDR4 SDRAM
DIMM Sizes	■ 32GB, 16GB, 8GB, 4GB

On-Board Devices (per node)

Chipset	■ Intel® C246 chipset
SATA	■ SATA3 (6Gbps) via Intel® C246 controller; RAID 0, 1, 5, 10
IPMI	■ Support for Intelligent Platform Management Interface v2.0 ■ IPMI 2.0 with virtual media over LAN and KVM over LAN support ■ ASPEED AST2500 BMC
Network Controllers	■ Dual LAN with Intel® i350
Graphics	■ Aspeed AST2500 graphics

Input / Output (per node)

SATA	■ 2 SATA3 (6Gbps) ports
LAN	■ 2 RJ45 Gigabit Ethernet LAN ports

System BIOS

BIOS Type	■ UEFI 128Mb
BIOS Features	■ ACPI 1.0 / 2.0 / 3.0 / 4.0 ■ APM 1.2 ■ DMI 2.3 ■ Hardware BIOS Virus protection ■ PCI 2.3 ■ Plug and Play (PnP) ■ RTC (Real Time Clock) Wakeup ■ SMBIOS 2.7.1 ■ UEFI 2.3.1 ■ USB Keyboard support

Front Window (each node)

Switch	■ Power / UID
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Chassis

Form Factor	■ 3U
Model	■ CSE-939HN-R2K04BP

Dimensions and Weight

Height	■ 5.21" (132.5 mm)
Width	■ 17.5" (444.5 mm)
Depth	■ 29.5" (749.3 mm)
Package	■ 16.1" (H) x 28.35" (W) x 42.36" (D)
Weight	■ Net Weight: 132lbs (59.87kg) ■ Gross Weight: 125lbs (56.70kg)
Color	■ Black

Expansion Slots (per Node)

Micro-LP	■ 1 Micro-LP slot (MicroLP upgradable)
M.2	■ M.2 Interface: 1 PCI-E 3.0 x4 and SATA ■ M.2 Form Factor: 2280, 22110 ■ M.2 Key: M-Key

Drive Bays (per node)

Internal	■ 2x 3.5" SATA3 drives or 4x 2.5" SATA3 drives or 2x 2.5" NVMe + 2x 2.5" SATA3 drives or 2x 2.5" NVMe + 1x 3.5" SATA3 drive
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System Cooling

Fans	■ 4x 9cm Heavy duty fans with optimal cooling zone
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Power Supply (76mm Width)

2000W Titanium Redundant Power Supplies with PMBus and Reverse Airflow	
Total Output Power	■ 1000W: 100 – 127Vac ■ 1800W: 200 – 220Vac ■ 1980W: 220 – 230Vac ■ 2000W: 230 – 240Vac ■ 2000W: 200 – 240Vac (UL/CUL only)
Dimension (W x H x L)	■ 76 x 40 x 336 mm
Input	■ 1000W: 100-127 Vac / 12.5-9.5 A / 50-60 Hz ■ 1800W: 200-220 Vac / 10-9.5 A / 50-60 Hz ■ 1980W: 220-230 Vac / 10-9.8 A / 50-60 Hz ■ 2000W: 230-240 Vac / 10-9.8 A / 50-60 Hz ■ 2000W: 200-240 Vac / 11.8-9.8 A / 50-60 Hz (UL/cUL only)
+12V	■ Max: 83.3A / Min: 0A (100Vac-127Vac) ■ Max: 150A / Min: 0A (200Vac-220Vac) ■ Max: 165A / Min: 0A (220Vac-230Vac) ■ Max: 166.7A / Min: 0A (230Vac-240Vac) ■ Max: 166.7A / Min: 0A (200-240 Vac) (UL/cUL only)
+5Vsb	■ Max: 1A / Min: 0A
Output Type	■ 27 Pairs Gold Finger Connector
Certification	 Titanium Level [Test Report]

PC Health Monitoring

CPU	■ Monitors for CPU Cores, +3.3V, +5V, +12V, +3.3V Standby, +5V Standby, VBAT, Memory, Chipset Voltages. ■ 3-Phase-switching voltage regulator with auto-sense from 0.5V-2.3V
FAN	■ Cooling zone
Temperature	■ Monitoring for CPU and chassis environment

Operating Environment / Compliance

RoHS	■ RoHS Compliant
Environmental Spec.	■ Operating Temperature: 10°C to 35°C (50°F to 95°F) ■ Non-operating Temperature: -40°C to 70°C (-40°F to 158°F) ■ Operating Relative Humidity: 8% to 90% (non-condensing) ■ Non-operating Relative Humidity: 5% to 95% (non-condensing)

Parts List

Parts List - (Items Included)

	Part Number	Qty	Description
Motherboard / Chassis	MBD-X11SCE-F	12	Super X11SCE-F Motherboard
	CSE-939HN-R2K04BP	1	3U Chassis
Add-on Card / Module	AOM-BPN-MC12S-P	12	AOM-BPN-MC12S
Add-on Card / Module	AOM-CGP-I2M-P	12	AOM-CGP-I2M-O-P
Add-on Card / Module	AOM-GEM-001-P	1	[NR]AOM-GEM-001-O-P
Add-on Card / Module	AOM-LAN-MC12S-P	1	[NR]AOM-LAN-MC12S-P
Add-on Card / Module	AOM-PDB-MC12S-P	12	AOM-PDB-MC12S
Backplane	BPN-SAS-939HS	1	12-port 3U (CSE-939HS) 12-node MicroCloud hot swappable midplane
Cable 1	CBL-0218L	1	USB/KVM/SUVI,36 PIN TO 9 PIN/15 PIN/2 USB CH,11.5CM,30/28AWG
Cable 2	CBL-PWCD-0578	2	PWCD,US,IEC60320 C14 TO C13,3FT,14AWG
Air Shroud	MCP-310-93904-0N	12	Mylar air shroud for VLP 4 DIMM (short gap, quick install)
Heatsink / Retention	SNK-P0047PSR	12	LP CPU Heat Sink for 12-node Micro Cloud Series Servers
Heatsink / Retention	SNK-P0047PSRK	12	Low Profile CPU Heat Sink for MBI-6119G-C2 Micro Blade Server
* Power Supply	PWS-2K04F-1R	2	AC-DC 2000W, Titanium Level, Redundancy, 1U, PMBus 1.2, 360x76x40 mm,HF,RoHS/REACH
* Power Distributor	PDB-PT939-DSG	2	Adapter Board for SC939 special gold finger directly plug to BP.
* Cable 3	CBL-0355L	2	ETHERNET,CAT5E,RJ45 W/BOOT,GREEN,UTP,2FT (60CM),24AWG
* Cable 4	CBL-CDAT-0662	1	CBL,SGPIO,2X4F TO 2X4F,P2.54,ROUND CABLE,61.5CM,28AWG
* Cable 5	CBL-PWCD-0859	1	PWCD,US,IEC60320 C14 TO RA C13 w/SR for 939HS PSU1,3FT,14AWG
* Cable 6	CBL-PWCD-0860	1	PWCD,US,IEC60320 C14 TO RA C13 w/SR for 939HS PSU2,3FT,14AWG
* FAN 1	FAN-0195L4	4	92x92x76 mm Counter-rotating Cooling Fan for 3U12N Microclou
* Rail Set	MCP-290-41803-0N	1	Fat tw in F418 / F424 Static Rail set support 28-33.5 inch depth rail,RoHS/REACH,PBF

- Notes:
1. Parts with * are inside the chassis
 2. Excessive parts might not be shipped, including but not limited to excessive drive trays, fans, riser brackets, air shrouds, IO shields, cables.....etc.

Optional Parts List

	Part Number	Qty	Description
Network Card(s)	AOM-C25G-m1SM	-	MicroLP, 1x 25GbE SFP28, PCI-E 3.0 x8, Mellanox®
	AOM-CTGS-i2TM	-	MicroLP, 2x 10GbE Base-T, PCI-E 3.0 x4, Intel® X550
	AOM-CTG-i1SM	-	MicroLP, 1 x 10GbE SFP+, PCI-E 2.0 x8, Intel® 82599EN, ver 1.21 only
SATA DOM	MEM-IDSAHM2-032G	-	SATA3 ServerDOM MH 3ME 32GB MLC w / Pin8 VCC Horizontal
	MEM-IDSAHM2-064G	-	SATA3 ServerDOM MH 3ME 64GB MLC w / Pin8 VCC Horizontal
	MEM-IDSAHM1-128G	-	SATA3 DOM SH 3ME3 V2 128GB MLC w / Pin8 VCC Horizontal
TPM security module	AOM-TPM-9670V	1	SPI capable TPM 2.0 with Infineon 9670 controller, Vertical form factor
TPM security module	AOM-TPM-9671V	1	SPI capable TPM 1.2 with Infineon 9670 controller, Vertical form factor
Global Services & Support	OS4HR3/2/1	-	3/2/1-year onsite 24x7x4 service
	OSNBD3/2/1	-	3/2/1-year onsite NBD service
Software	SFT-OOB-LIC • eStore	1	OOB Management Package (per node license)
Software	SFT-DCMS-Single	1	DataCenter Management Package (per node license)